

1. In a system that includes one or more nodes connected with a central server that receives content including audio and video content from a broadcast source, and wherein the content is delivered to the one or more nodes by feature applications, a method for dynamically distributing a feature application across a node and the central server, the method comprising:

loading a node application at the node;

selecting the feature application for distribution across the node and the server, wherein the feature application comprises a user interface portion and a process portion;

loading a user interface portion of the feature application at the node by the node application, wherein the user interface portion communicates with a process portion of the feature application that is loaded on the central server;

making a request, by the user interface portion, to the process portion for data;

receiving processed data from the process portion; and

presenting the processed data at the node.

2. A method as defined in claim 1, further comprising the node application:

loading additional user interface portions of additional feature applications;

and

allocating resources of the node between the user interface portions of the feature applications that are loaded on the node.

3. A method as defined in claim 1, wherein selecting the feature application further comprises receiving user input.

4. A method as defined in claim 1, wherein loading a node application further comprises:

displaying a preliminary user interface at the node;

requesting a current time and a current date from the central server;

requesting user-independent preferences for the node;

requesting an initial user interface; and

displaying the initial user interface at the node, wherein the feature application is launched from the initial user interface.

5. A method as defined in claim 1, wherein making a request, by the user interface portion, to the process portion for data further comprises making a remote procedure call using a protocol.

6. A method as defined in claim 5, wherein the protocol is one of COM, DCOM and SOAP.

7. A method as defined in claim 1, wherein presenting the processed data at the node further comprises constructing a user interface using standards provided by the node application.

8. A method as defined in claim 8, wherein constructing a user interface further comprises:

creating an XHTML representation of the user interface;

generating one or more placeholder areas within the XHTML;

describing the presentation and layout of the user interface; and

using a behavior to control creation of dynamic content.

9. In a system that includes one or more nodes connected with a central server that receives content including audio and video content from a broadcast source, and wherein the content is delivered to the one or more nodes by feature applications, a computer program product for implementing a method for dynamically distributing a feature application across a node and the central server, the computer program product comprising:

a computer readable medium having computer executable instructions for performing the method, the method comprising:

loading a node application at the node;

selecting the feature application for distribution across the node and the server, wherein the feature application comprises a user interface portion and a process portion;

loading a user interface portion of the feature application at the node by the node application, wherein the user interface portion communicates with a process portion of the feature application that is loaded on the central server;

making a request, by the user interface portion, to the process portion for data;

receiving processed data from the process portion; and

presenting the processed data at the node.

10. A computer program product as defined in claim 9, further comprising the node application:

loading additional user interface portions of additional feature applications;
and
allocating resources of the node between the user interface portions of the feature applications that are loaded on the node.

11. A computer program product as defined in claim 9, wherein selecting the feature application further comprises receiving user input.

12. A computer program product as defined in claim 9, wherein loading a node application further comprises:

displaying a preliminary user interface at the node;
requesting a current time and a current date from the central server;
requesting user-independent preferences for the node;
requesting an initial user interface; and
displaying the initial user interface at the node, wherein the feature application is launched from the initial user interface.

13. A computer program product as defined in claim 9, wherein making a request, by the user interface portion, to the process portion for data further comprises making a remote procedure call using a protocol.

14. A computer program product as defined in claim 13, wherein the protocol is one of COM, DCOM and SOAP.

15. A computer program product as defined in claim 9, wherein presenting the processed data at the node further comprises constructing a user interface using standards provided by the node application.

16. A computer program product as defined in claim 15, wherein constructing a user interface further comprises:

creating an XHTML representation of the user interface;

generating one or more placeholder areas within the XHTML;

describing the presentation and layout of the user interface; and

using a behavior to control creation of dynamic content.

17. In a system that includes one or more nodes connected with a central server that receives content including audio and video content from a broadcast source, and wherein the content is delivered to the one or more nodes by feature applications, a method for dynamically distributing a feature application across a node and the central server, the method comprising:

receiving a request for a node application from the node;

sending the node application to the node, wherein the node application is retrieved from a remote server over a network if the node application for the node is not stored on the central server;

receiving a request for the feature application;

delivering a user interface portion of the feature application to the node, wherein a process portion of the feature application is executed on the central server;

processing each request from the user interface portion by the process portion of the feature application, wherein the process portion utilizes resources of the central server to process each request; and

providing the user interface portion with results of each request, wherein the user interface portion presents the results to the user.

18. A method as defined in claim 17, wherein sending the node application further comprises sending an initial user interface to the node.

19. A method as defined in claim 17, wherein processing each request from the user interface portion further comprises formatting the results of each request using a standard.

20. A method as defined in claim 17, wherein providing the user interface portion with results of each request further comprises delivering the results using a protocol.

21. A method as defined in claim 20, wherein the protocol is a remote procedure call.

22. A method as defined in claim 17, wherein processing each request from the user interface portion further comprises accessing content stored on the server or on a remote server.

23. A method as defined in claim 17, further comprising recording content, wherein the content comprises a television program that is received over the satellite system or the cable system.

24. A method as defined in claim 17, further comprising implementing the node application on the central server such that a user can select the feature application from the central server.

25. In a system that includes one or more nodes connected with a central server that receives content including audio and video content from a broadcast source, and wherein the content is delivered to the one or more nodes by feature applications, a computer program product for implementing a method for dynamically distributing a feature application across a node and the central server, the computer program product comprising:

a computer readable medium having computer executable instructions for performing the method, the method comprising:

receiving a request for a node application from the node;

sending the node application to the node, wherein the node application is retrieved from a remote server over a network if the node application for the node is not stored on the central server;

receiving a request for the feature application;

delivering a user interface portion of the feature application to the node, wherein a process portion of the feature application is executed on the central server;

processing each request from the user interface portion by the process portion of the feature application, wherein the process portion utilizes resources of the central server to process each request; and

providing the user interface portion with results of each request, wherein the user interface portion presents the results to the user.

26. A computer program product as defined in claim 25, wherein sending the node application further comprises sending an initial user interface to the node.

27. A computer program product as defined in claim 25, wherein processing each request from the user interface portion further comprises formatting the results of each request using a standard.

28. A computer program product as defined in claim 25, wherein providing the user interface portion with results of each request further comprises delivering the results using a protocol.

29. A computer program product as defined in claim 28, wherein the protocol is a remote procedure call.

30. A computer program product as defined in claim 25, wherein processing each request from the user interface portion further comprises accessing content stored on the server or on a remote server.

31. A computer program product as defined in claim 25, further comprising recording content, wherein the content comprises a television program that is received over the satellite system or the cable system.

32. A computer program product as defined in claim 25, further comprising implementing the node application on the central server such that a user can select the feature application from the central server.

33. In a system that includes one or more nodes connected with a central server that receives content including audio and video content from a broadcast source, and wherein the content is delivered to the one or more nodes by feature applications, a node application for distributing the feature applications across the server and a node, the node application comprising:

a presentation engine that provides support for first standards such that each feature application, as appropriate, can render a user interface;

an execution engine that provides support for second standards such that each feature application, as appropriate, can execute on the node;

a compatibility layer that permits the node application and the feature applications to be portable across multiple operating systems and multiple processor architectures; and

a allocation module that dynamically allocates resources of the node to one or more user interface portions of the feature applications.

34. A node application as defined in claim 33,

wherein the first standards comprise: HTML; XHTML; CSS; PNG; MNG; JPEG; MPEG; XML; SOAP; HTTP; and TCP/IP; and

wherein the second standards comprise COM, DCOM, and ECMAScript.

35. A node application as defined in claim 33, wherein the node application further comprises a loading module for loading and for unloading applications on the node.

36. A node application as defined in claim 35, wherein the loading module loads and unloads user interface portions of applications.

37. A node application as defined in claim 35, wherein the loading module makes requests using a protocol to a process portion of the feature applications loaded on the central server.

38. A node application as defined in claim 37, wherein the request is a remote procedure call, and wherein the protocol is one of COM, SOAP and DCOM.

39. In a system that includes one or more nodes connected with a central server that receives content including audio and video content from a broadcast source, and wherein the content is delivered to the one or more nodes by feature applications, a method for dynamically distributing a feature application across a node and the central server, the method comprising:

loading a node application at the node;

selecting the feature application for distribution across the node and the server, wherein the feature application comprises a user interface portion and one or more service portions that are created by the user interface portion on either the node or the server when data is needed;

loading a user interface portion of the feature application at the node by the node application, wherein the user interface portion communicates with the one or more service portions;

making a request, by the user interface portion, to a particular service portion for data;

receiving processed data from the particular service portion; and

presenting the processed data at the node.

40. A method as defined in claim 39, further comprising the node application:

loading additional user interface portions of additional feature applications;

and

allocating resources of the node between the user interface portions of the feature applications that are loaded on the node.

41. A method as defined in claim 39, wherein selecting the feature application further comprises receiving user input.

42. A method as defined in claim 39, wherein loading a node application further comprises:

displaying a preliminary user interface at the node;

requesting a current time and a current date from the central server;

requesting user-independent preferences for the node;

requesting an initial user interface; and

displaying the initial user interface at the node, wherein the feature application is launched from the initial user interface.

43. A method as defined in claim 39, wherein making a request, by the user interface portion, to the particular service portion for data further comprises making a remote procedure call using a protocol.

44. A method as defined in claim 43, wherein the protocol is one of COM, DCOM and SOAP.

45. A method as defined in claim 39, wherein presenting the processed data at the node further comprises constructing a user interface using standards provided by the node application.

46. A method as defined in claim 45, wherein constructing a user interface further comprises:

creating an XHTML representation of the user interface;
generating one or more placeholder areas within the XHTML;
describing the presentation and layout of the user interface; and
using a behavior to control creation of dynamic content.

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47. In a system that includes one or more nodes connected with a central server that receives content including audio and video content from a broadcast source, and wherein the content is delivered to the one or more nodes by feature applications, a method for dynamically distributing a feature application across a node and the central server, the method comprising:

receiving a request for a node application from the node;

sending the node application to the node, wherein the node application is retrieved from a remote server over a network if the node application for the node is not stored on the central server;

receiving a request for the feature application;

delivering a user interface portion of the feature application to the node, wherein a process portion of the feature application is executed on the central server;

processing each request from the user interface portion with a service portion that is created by the user interface portion of the feature application on either the central server or the node, wherein the service portion utilizes resources of the central server or of the node to process each request; and

providing the user interface portion with results of each request, wherein the user interface portion presents the results to the user.

48. A method as defined in claim 47, wherein sending the node application further comprises sending an initial user interface to the node.

49. A method as defined in claim 47, wherein processing each request from the user interface portion further comprises accessing content stored on the server or on a remote server.

50. A method as defined in claim 47 , further comprising recording content, wherein the content comprises a television program that is received from the broadcast source.

51. A method as defined in claim 17, further comprising implementing the node application on the central server such that a user can select and execute the feature application from the central server.